

REMARKS

Claims 2 to 12 and 14 to 23 are pending in the application.¹ Claims 8 and 11 are independent. Favorable reconsideration and further examination are respectfully requested.

In the Office Action, claims 11, 21 and 14 were objected to for the reasons noted on page 2 of the Office Action. The amendments shown above are believed to address those objections, and withdrawal thereof is respectfully requested.

Claims 1 to 10, 16 to 18, 21 and 22 were rejected over U.S. Patent Publication No. 2001/0048352 (Klee); claims 11, 12 and 14 were rejected over JP2002-217676 (Shibata), claims 11, 12, 14 and 15 were rejected over DE10149542 (Aigner); and claims 19 and 20 were rejected over Klee in view of U.S. 6,548,942 (Panasik).

Initially, regarding the rejection over Aigner, Applicants note that the publication date of Aigner is April 17, 2003, which is after the earliest priority date of the subject application, namely October 8, 2002. Accordingly, Applicants respectfully request for the Examiner to remove Aigner as a reference against the subject application.

Regarding independent claim 11, as shown above, Applicants have incorporated the subject matter of claim 13 into claim 11. Applicants have also amended claim 11 to recite a substrate and an acoustic mirror between the substrate and the stack of resonators. The applied art is not understood to disclose or to suggest this feature of the claims. For example, Shibata simply shows resonators, without any mention of an acoustic mirror. Accordingly, independent claim 11 is believed to be patentable over the art.

¹ The Examiner is urged to independently confirm this recitation of the pending claims.

Amended independent claim 8 defines a filter comprising resonators for use with bulk acoustic waves. Each of the resonators comprises a lower layer region comprising a first electrode, an upper layer region comprising a second electrode, and a piezoelectric layer between the first electrode and the second electrode. The resonators are in at least one of a lattice-type arrangement and a stacked crystal filter arrangement. A capacitor is in parallel with at least one of the resonators or in series with at least one of the resonators.

The applied art is not understood to disclose or to suggest the foregoing arrangement. In particular, Klee describes a tunable filter arrangement in which resonators R1 and R2 include respective capacitors C1 and C4 in parallel (see Fig. 2 of Klee). The arrangement shown in Fig. 2, however, is an L-type arrangement, and is not a lattice-type arrangement (e.g., Fig. 9 of this application) or a stacked crystal filter arrangement (an arrangement in which two resonators share a common electrode). The remainder of Klee likewise does not disclose or suggest these arrangements. Accordingly, claim 8 is believed to be patentable over the art.

Each of the dependent claims is also believed to define patentable features of the invention. Each dependent claim partakes of the novelty of its corresponding independent claim and, as such, has not been discussed specifically herein.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this

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paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

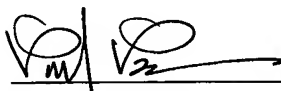
In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney can be reached at the address shown below. All telephone calls should be directed to the undersigned at 617-521-7896.

No additional fees are believed to be due for this amendment, however, if any fees are due, please charge them to deposit account 06-1050, referencing Attorney Docket No. 14219-080US1.

Respectfully submitted,

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Paul A. Pysher
Reg. No. 40,780

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906